

a floating pivot coupled to the lid and the actuator to align the lid with the opening when the lid closes.

28. (New) The system of claim 27, further comprising a fixed pivot coupled to the lid and the actuator.

29. (New) The system of claim 28, further comprising a guide link coupled to the fixed pivot.

30. (New) The system of claim 27, further comprising a load link coupled to the floating pivot.

31. (New) The system of claim 30, further comprising a guide shaft rotatably coupled to the load link.

32. (New) The system of claim 30, further comprising a drive pivot positioned at one end of the load link.

33. (New) The system of claim 32, further comprising a rod extending from the actuator coupled to the drive pivot to move the lid.

34. (New) The system of claim 27, further comprising a support bracket coupled to the actuator and the chamber body.

35. (New) A floating pivot to automatically align two objects, comprising:
a load link having first and second portions;

a bearing positioned between the first and second portions of the load link; and

a self-centering spring coupled to the perimeter of the bearing.

36. (New) The pivot of claim 35, further comprising a tension shim positioned between the load link and the bearing.

37. (New) The pivot of claim 35, further comprising a pivot screw adapted to tighten the bearing.

38. (New) The pivot of claim 35, wherein the self-centering spring comprises an O-ring.

39. (New) The pivot of claim 35, further comprising a lid coupled to a first end of the load link.

40. (New) The pivot of claim 35, further comprising a chamber body coupled to a second end of the load link.

41. (New) The pivot of claim 35, wherein the self-centering spring allows radial movements or axial movements.

42. (New) The pivot of claim 35, wherein the self-centering spring allows self-centering of a lid to a chamber body.

43. (New) The pivot of claim 35, wherein the self-centering spring comprises coil springs.

44. (New) A semiconductor processing system, comprising:

a chamber adapted to process a wafer, the chamber having an opening to facilitate access to the interior of the chamber; and

a lid coupled to the chamber opening, the lid having an open position and a closed position, the open and closed positions being moved horizontally in a substantially parallel manner relative to the opening; and

an actuator coupled to the lid to move the lid between the closed position and the open position.

45. (New) The system of claim 44, further comprising a floating pivot to automatically align the lid to the body of the chamber.

46. (New) The system of claim 45, wherein the pivot further comprises:

a load link having first and second portions;

a bearing positioned between the first and second portions of the bearing; and

a self-centering spring coupled to the perimeter of the bearing.